



US006033451A

**United States Patent** [19]

Fish et al.

[11] Patent Number: **6,033,451**[45] Date of Patent: **Mar. 7, 2000**[54] **VACUUM CLEANER BAG DOCKING ASSEMBLY**[75] Inventors: William G. Fish, Gulfport, Miss.;  
Charles F. Malone, New Bern, N.C.[73] Assignee: Oreck Holdings, LLC, Cheyenne,  
Wyo.

[21] Appl. No.: 09/107,710

[22] Filed: Jun. 30, 1998

[51] Int. Cl.<sup>7</sup> ..... A47L 5/28[52] U.S. Cl. .... 55/374; 55/376; 55/377;  
55/378; 55/DIG. 2; 15/350; 15/351[58] Field of Search ..... 55/374, 376, 377,  
55/378, 382, DIG. 2; 15/350, 351[56] **References Cited****U.S. PATENT DOCUMENTS**

4,381,192	4/1983	Grimard	55/376
4,539,026	9/1985	Kuplas	
4,591,369	5/1986	Stewart, Sr. et al.	
4,678,486	7/1987	Jacob et al.	
4,738,697	4/1988	Westergren	
5,028,245	7/1991	Stein et al.	
5,064,455	11/1991	Lackner	
5,089,038	2/1992	Kopco et al.	

5,092,915	3/1992	Lackner	
5,226,941	7/1993	Uibel et al.	
5,230,724	7/1993	Marafante et al.	
5,464,460	11/1995	Bosses	
5,544,385	8/1996	Jailor et al.	55/376
5,688,298	11/1997	Bosses	
5,820,643	10/1998	Lienenluke et al.	55/376

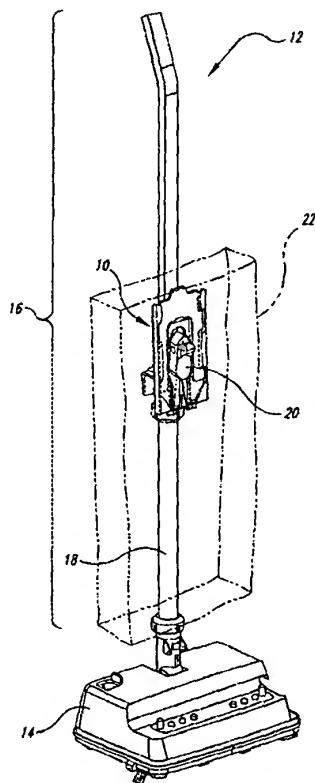
Primary Examiner—David A. Simmons

Assistant Examiner—Minh-Chau T. Pham

Attorney, Agent, or Firm—Seed and Berry LLP

[57] **ABSTRACT**

For use with vacuum cleaner bags of the type having a substantially rigid collar surrounding the bag opening, and with vacuum cleaners of the type having a dirty air outlet nozzle, a vacuum bag docking assembly is shown and described. The assembly incorporates an anchor member having a central opening for closely receiving the dirty air outlet nozzle. The assembly also incorporates a mounting member which engages the collar on the vacuum bag to secure the bag to the bag mounting member. The bag mounting member is pivotally connected to the anchor member, and moves between a loading position in which the bag can be inserted or removed from the mounting member, and a working position in which the bag opening engages the dirty air outlet nozzle.

**14 Claims, 6 Drawing Sheets**

2006033451A